

# User Guide

## ND4210w

Network Display

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For Your Records		
Model Name:	ND4210w	
Model Number:	VS11571	
Document Number:	ND4210w_UG_ENG_REV 1B	11-OCT-2006
Serial Number:	_____	
Purchase Date:	_____	

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# INTRODUCTION

Thank you for buying the **ViewSonic® Network Display**. This section introduces you to the **ND4210w Network Display**.

## PACKAGED CONTENTS

Please check that all the following items are in the package:



**ND4210w Network Display**  
with detachable speakers



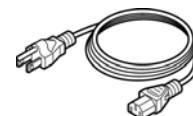
User Guide



Quick Start Guide



Remote Control  
with two AA batteries



Multi-Region  
Power Cords

## OPTIONAL ACCESSORY

The Wall Mount Kit accessory is available at [viewsonic.com](http://viewsonic.com)

## REQUIREMENTS

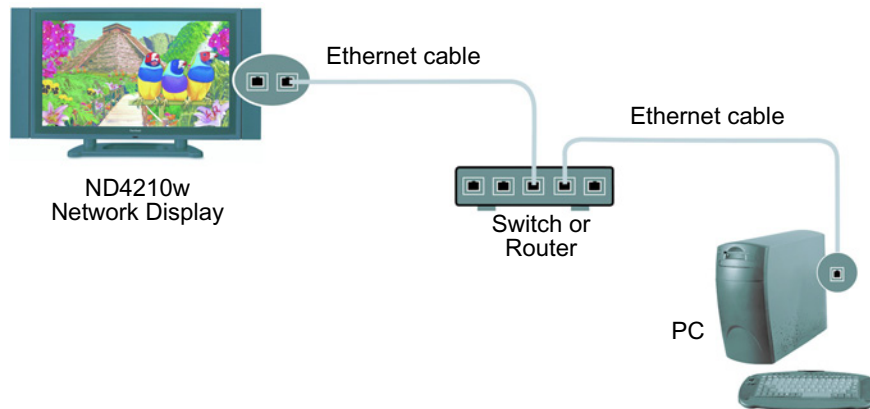
The **ND4210w Network Display** requires:

- **ViewSonic ND4210w Network Display** connected to AC power and a network or internet connection
- Streaming video server and/or live encoder
- If using the **VNC Client** feature, be sure to install VNC software on your PC (sold separately)

# TWO MODES OF OPERATION

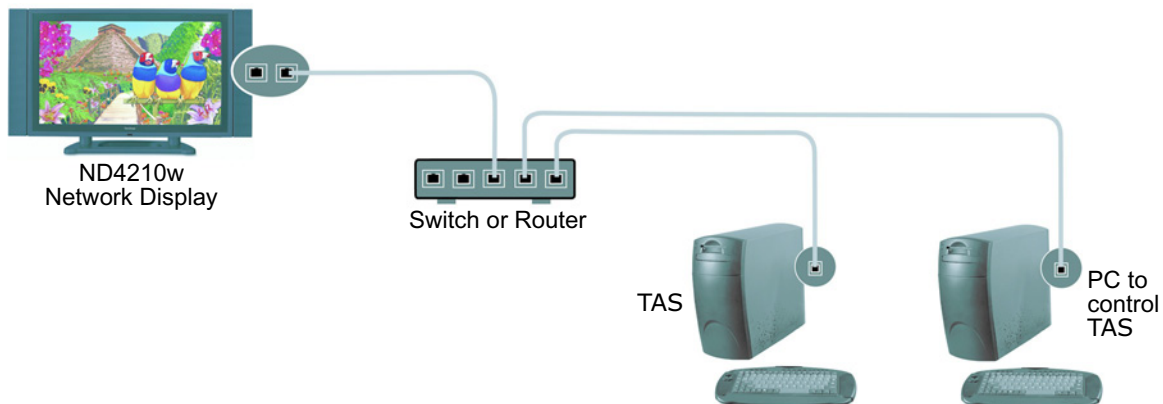
## STANDALONE

The setup allows the **ND4210w Network Display** to act as an independent network device controlled by one server.



## TAS MANAGED

You can purchase Tivella Administration Server (TAS) separately through Tivella ([www.tivella.com](http://www.tivella.com)) or a Tivella dealer/reseller). A TAS server should be used to configure and manage multiple **Network Displays** remotely. TAS provides centralized scheduling of video content presentation on multiple **Network Displays**, as well as management and seamless operation of a Cisco® ACNS Content Distribution Networking infrastructure if one is installed. This configuration greatly reduces maintenance overhead, when TAS and the **Network Display** are connected to the network (LAN/WAN) with the TAS acting as a manager for multiple **Network Displays**.



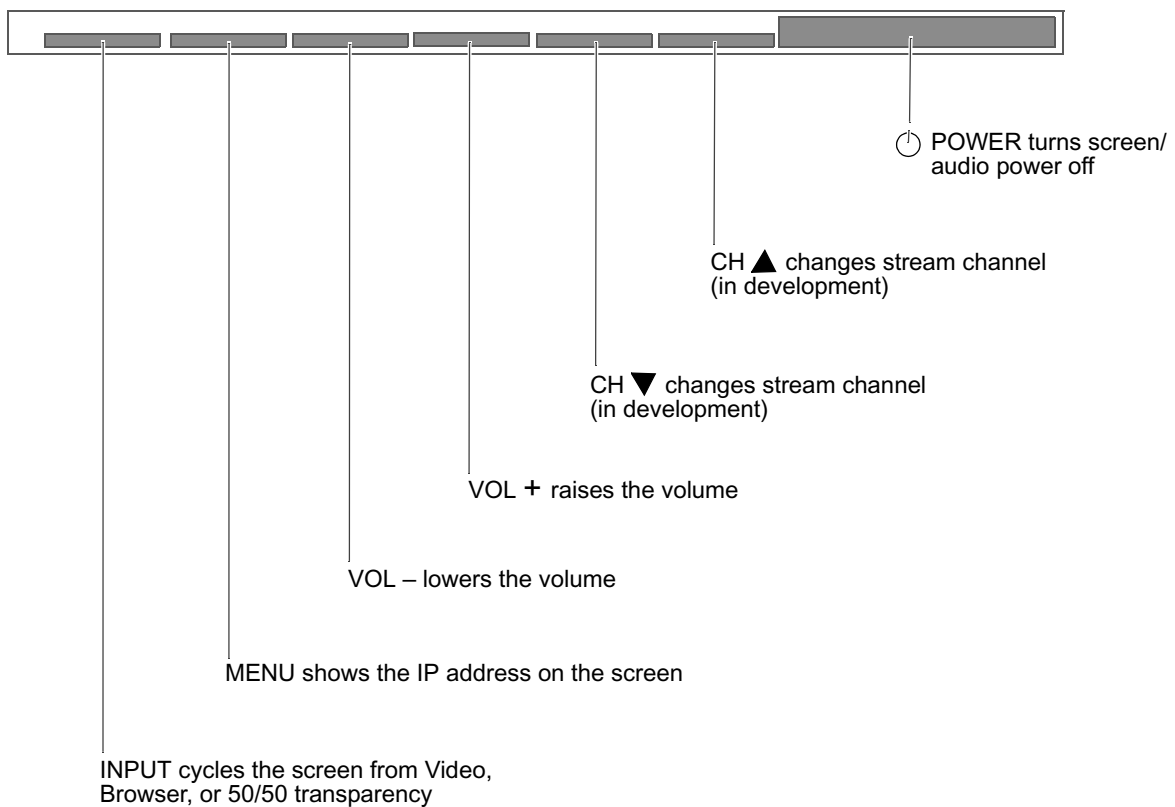
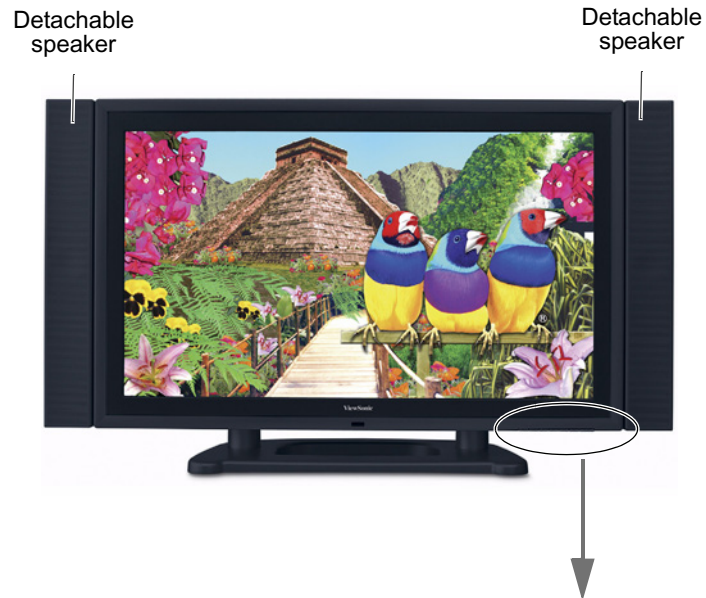
# TWO MODES OF COMMUNICATION

There are two modes of communication with the **ND4210w Network Display**: an HTTP web interface and a Telnet advanced command line interface. This document focuses on the web interface only.

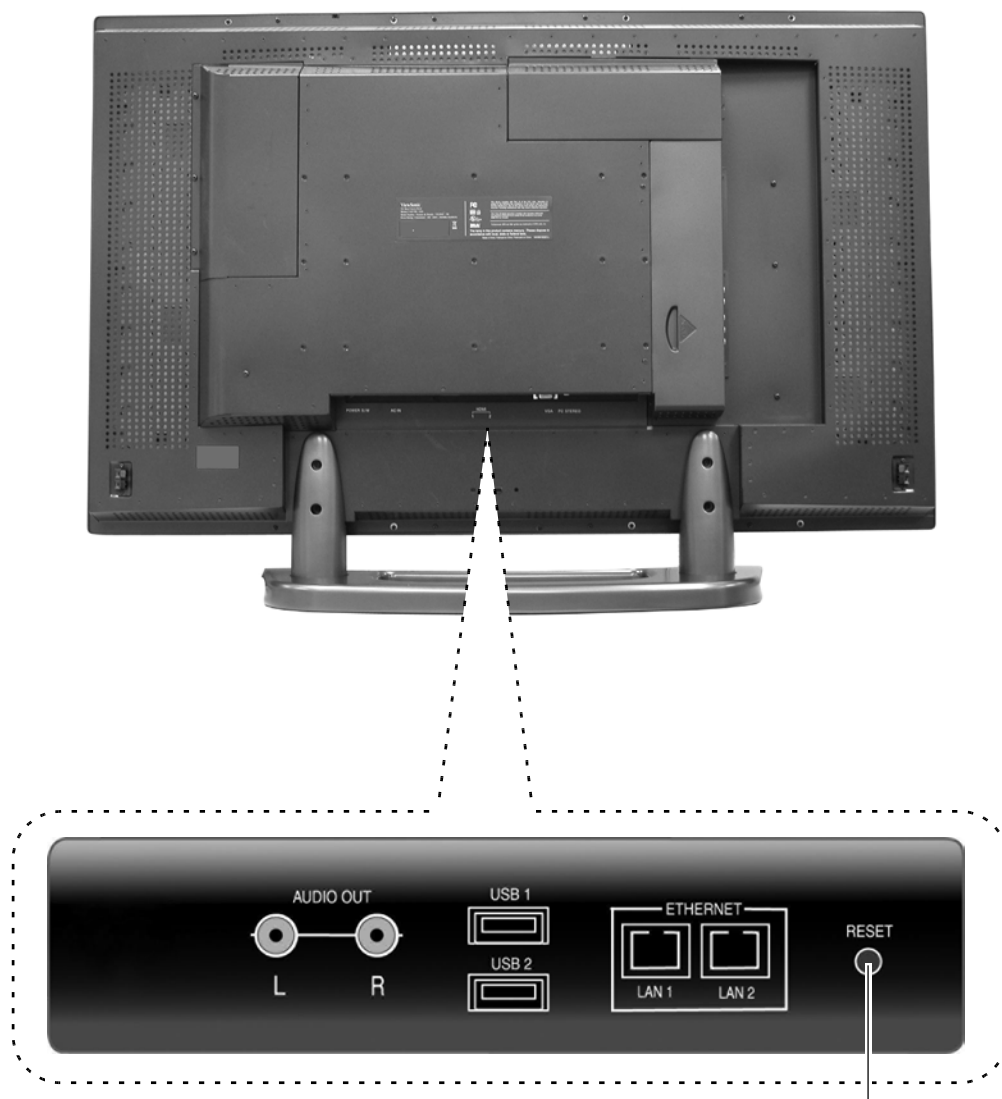
## FEATURES

- Integrated display for A/V IP delivery
- Multiple **Network Displays** can be daisy chained with different IP addresses
- Supports scheduling of different video content across multiple displays
- No need for additional external PC or set-top box with a switch
- Remote management control and status reporting
- MPEG A/V decoding, MPEG 1/2/4, Macromedia Flash
- Auto-MDIX (no crossover cabling)
- Powerful combination of the Sigma Design® EM8621L and the Freescale® MPC8247 for smooth playback
- Can be installed with an optional wall mount
- Uses Tivella® content management software
- Devices can be remotely controlled from virtually anywhere with a network or internet connection
- Wireless Ethernet support eliminates the need to run cables to an existing network
- Remote management allows you to adjust the screen and see valuable information without being physically in front of the unit
- Network ready, easy installation
- Local content buffering or storing in hard drive
- AJAX support in browser

# FRONT VIEW

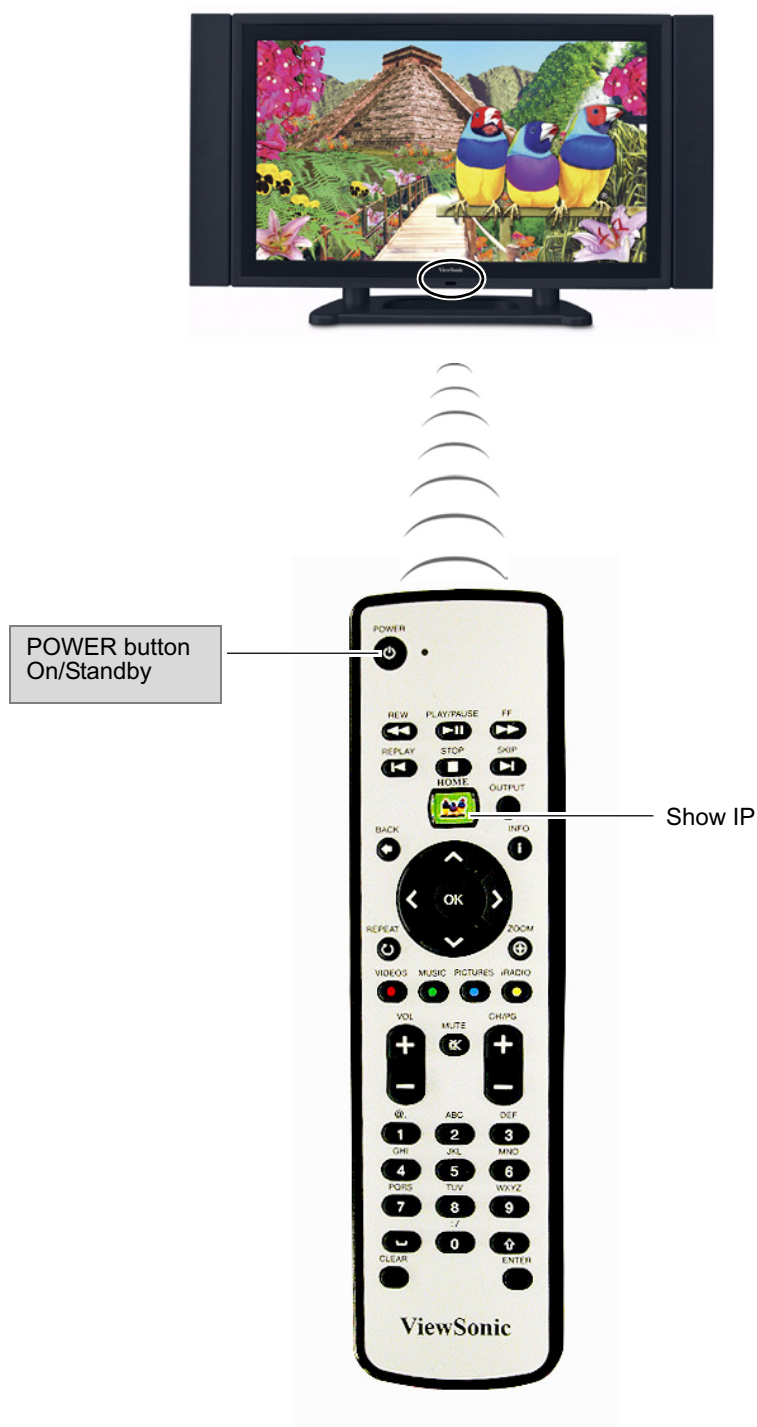


## BACK VIEW



**RESET** button  
Press and hold the **RESET** button for five (5) seconds to restore the default settings.

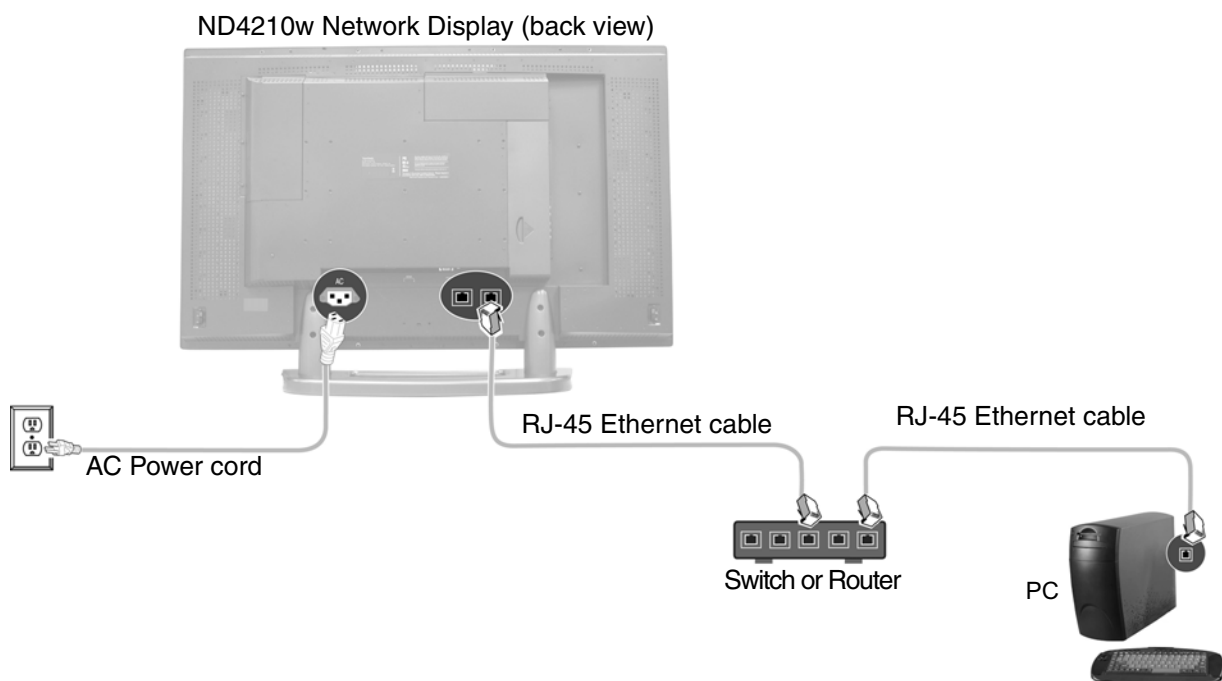
# REMOTE CONTROL



# SETTING UP THE NETWORK DISPLAY

## 1. CONNECT TO A SWITCH OR ROUTER

Connect an RJ-45 Ethernet cable from the **Network Display** to either a switch or a router with DHCP services. See your IT Administrator for a code to the switch or a router. Connect the AC power cord from the **Network Display** to an AC power source like a wall outlet.

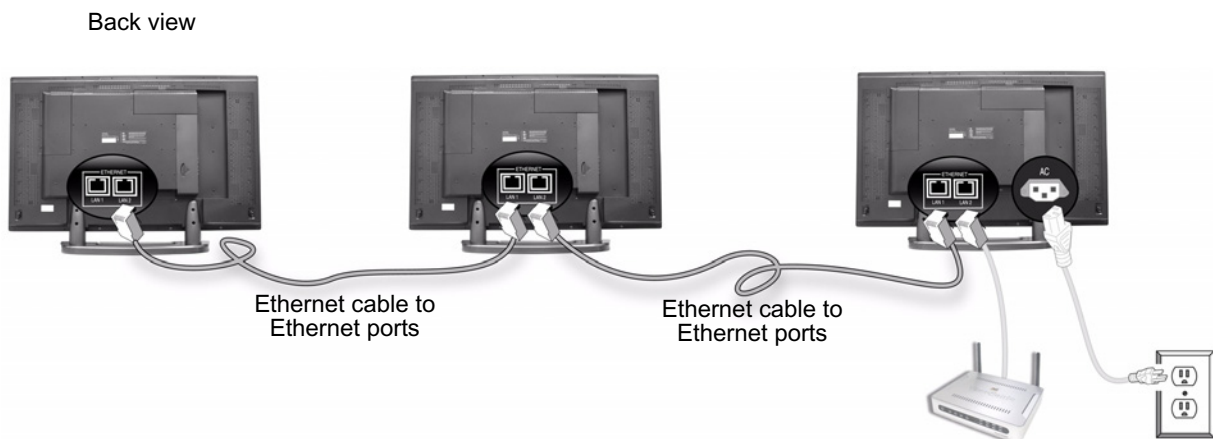


## Connect Multiple Network Displays (optional)

You can daisy chain several **Network Displays** together. The two built-in Ethernet ports make the **ViewSonic Network Displays** unique because you do not need separate network switches or PCs for each **Network Display**. Media content on each **Network Display** can be scheduled independently when connected to an external server.



Plug another RJ-45 Ethernet cable into an Ethernet port of another **Network Display**. You can connect either of the two Ethernet ports of one unit to either of the two Ethernet ports of another unit.



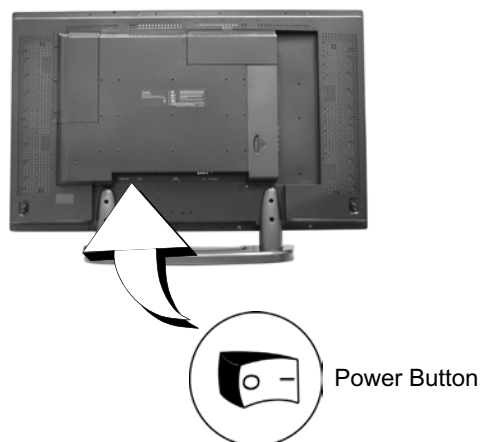


## Connect External Speakers (optional)



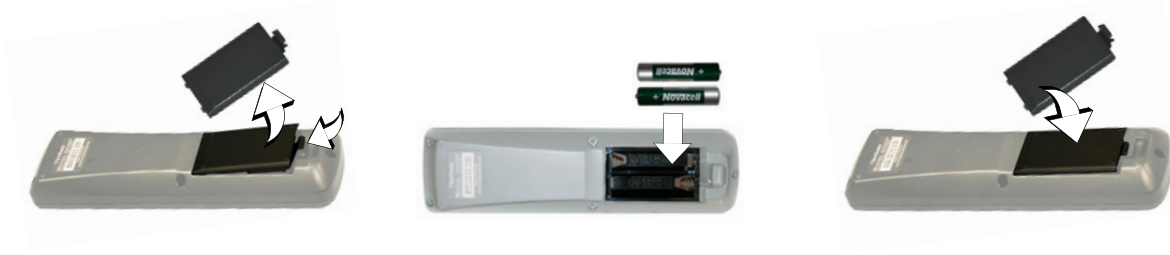
## 2. TURN POWER ON TO THE NETWORK DISPLAY

Wait for the splash screen to appear with the IP address. Make a note of the IP address on a piece of paper because you will need this in another step.



### 3. PUT BATTERIES IN REMOTE CONTROL

Remove the back cover from the remote control as shown below. Put two AA batteries in the remote control. Be sure to match the positive end of the battery with the positive end of the compartment. Put the cover back on the remote control.



### 4. LOGIN

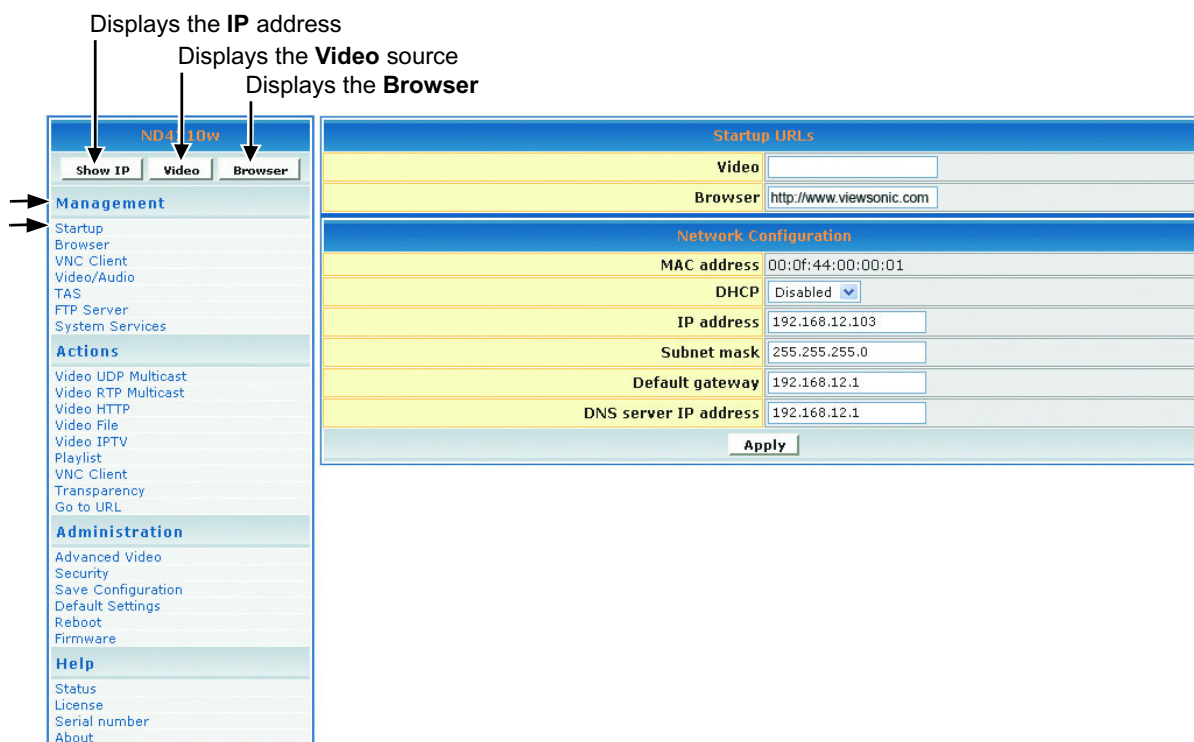
Open an Internet Browser, i.e., **Internet Explorer** on a PC in the same network. In the **URL address** field, type the IP address of the **ND4210w** noted in a previous step > press **Enter**. The **Login** screen appears. Type the defaults **Login: admin** and **Password: admin**. For security purposes, we recommend that you change the default IP address, Login and Password. *For more information, see the **Security** section in this user guide.* After logging in successfully, the **Network Configuration** screen appears as shown on the next page. **Note:** The **ND4210w** automatically logs you out after five minutes of inactivity.

*For information on how to change network settings on an OS other than Windows, please consult the OS user guide or your Network Administrator.*

# MANAGEMENT

## STARTUP URL/NETWORK CONFIGURATION

The **Network Configuration** screen allows you to select the video that appears on-screen when you boot up the **ND4210w**. To go to the **Network Configuration** screen after logging into the **ND4210w**, select **Management > Startup**. The **Startup URLs** screen and the **Network Configuration** screen appears as shown below.



1. To play a particular video at startup, in the **Video** field, enter a valid HTML page. Here are some examples:

- **http://<ip-address>/<mpeg-1/2-file-located on WEB Server>**
- **udp://<ip-multicast-address>/port**
- **rtp://<multicast-address>/port**
- **iptv://<ip-multicast-address>/videoport/audioprt**
- **playlist=http://<ip-address>/<playlist-file-located-on-WEB-server>**. For more information about creating and playing a playlist with specific content, in a specific order, looped or not looped, see the **PLAYLIST** section in this guide.

Continued . . .

2. In the **Browser** field, enter a startup web screen (for example, <http://www.viewsonic.com>).  
Note: The **MAC address** is a read-only field that displays the built-in MAC address of the unit.
3. In the **DHCP** field of the **Network Configuration** screen, tap the down arrow for the pull-down menu and select **Enabled** to dynamically get network parameters. Make sure there are values in the **IP address**, **Mask**, **Gateway**, and **DNS** fields although DHCP assigns values to these fields automatically. If you select **Disabled**, type valid network parameters in these fields.
4. If any changes were made to this screen, do the following:
  - To enable the changes, click **Apply**
  - To save the changes, click the **Administration** menu > click **Save Configuration** > click **Save**.

# BROWSER CONFIGURATION

The **Browser Configuration** screen allows you to make specific screen settings for a specific URL that you chose. Click **Management > Browser**. The screen shown below appears. Note: 1 millisecond = 1/1000th second.

ND4210w	
Show IP	Video
Management	
Startup	
Browser	
VNC Client	
Video/Audio	
TAS	
FTP Server	
System Services	
Actions	
Video UDP Multicast	
Video RTP Multicast	
Video HTTP	
Video File	
Video IPTV	
Playlist	
VNC Client	
Transparency	
Go to URL	
Administration	
Advanced Video	
Security	
Save Configuration	
Default Settings	
Reboot	
Firmware	
Help	
Status	
License	
Serial number	
About	

Browser Configuration	
Macromedia Flash Acceleration	Disabled
Macromedia Flash Transparency Source	Browser
Screen rotation angle (clockwise)	0
Browser Proxy	Disabled
Browser Proxy IP	
Browser Proxy PORT	0
Default transparency between OSD and video layer.	128
Start screen display time (milliseconds)	5000
Screen Height	768
Screen Width	1366
Apply	

1. In the **Macromedia Flash Transparency Source** field, select one of the options from the pull-down menu.
2. In the **Screen rotation angle (clockwise)** field, select one from the pull-down menu for the angle of rotation of the HTML content displayed on-screen. This feature is useful when the **ND4210w** is installed vertically.
3. In the **Browser Proxy** field, select **Enabled** or **Disabled** from the pull-down menu.
4. In the **Browser Proxy IP** field, type an IP address if the **Browser Proxy** was Enabled.
5. In the **Browser Proxy PORT** field, type the port if the **Browser Proxy** was Enabled.
6. In the **Default transparency between OSD and video layer** field, type a number that is between 0 to 255: (128 is average where video and graphics blend together). Also, see examples in the Transparency section of this guide.
  - 0 = video only, no graphics
  - 255 = graphics only, no video

Continued . . .

7. In the **Start screen display time** field, type the number of milliseconds you want the initial screen to be displayed at startup. (1 millisecond = 1/1000 second)
8. In the **Screen Height** field, type the height of the screen that is displaying your graphics image.
9. In the **Screen Width** field, type the width of the screen that is displaying your graphics image.
10. If any changes were made to this screen, do the following:
  - To enable the changes, click **Apply**
  - To save the changes, click the **Administration** menu > click **Save Configuration** > click **Save**.

**IMPORTANT NOTE!** Due to memory limitations, certain large flash files may not work correctly.

# VNC CLIENT (MANAGEMENT)

The **VNC\* client configuration** screen shown below on the **Management** menu lets you set the device to start as a VNC client and connect automatically to the VNC server specified. This auto-start feature works only if the **VNC client** under **System services** is set to **YES** or **Enabled**.

**VNC server password** must be at least 6 characters (can be alpha-numeric).

**X and Y coordinates** let you set the size of the window of the remote desktop displayed if full screen is not desired.

**VNC full screen mode** lets you set the client to start up as full screen all the time.

**VNC auto restart mode** reconnects the client in the event of network interruption.

**Delay before restart VNC** sets the time between reconnects.

The screenshot shows the 'VNC client configuration' screen on a ViewSonic ND4210w device. The left sidebar contains a menu with the following sections:

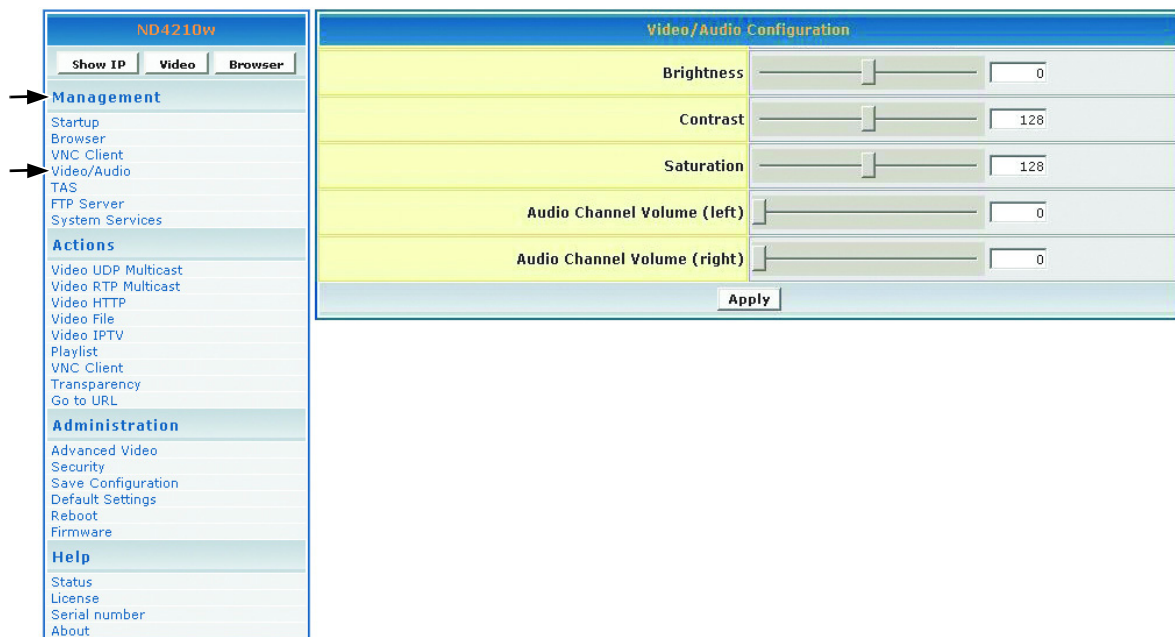
- Management**
  - Startup
  - Browser
  - VNC Client
  - Video/Audio
  - TAS
  - FTP Server
  - System Services
- Actions**
  - Video UDP Multicast
  - Video RTP Multicast
  - Video HTTP
  - Video File
  - Video IPTV
  - Playlist
  - VNC Client
  - Transparency
  - Go to URL
- Administration**
  - Advanced Video
  - Security
  - Save Configuration
  - Default Settings
  - Reboot
  - Firmware
- Help**
  - Status
  - License
  - Serial number
  - About

The main area displays the 'VNC client configuration' form with the following fields:

VNC client configuration	
VNC server address	<input type="text"/>
VNC server password	<input type="password"/>
X coordinate of VNC windows left-top corner	<input type="text" value="0"/>
Y coordinate of VNC windows left-top corner	<input type="text" value="0"/>
VNC full screen mode	<input type="button" value="No"/>
VNC auto restart mode	<input type="button" value="No"/>
Delay (in milliseconds) before restart VNC	<input type="text" value="5000"/>
<input type="button" value="Apply"/>	

\* You must have VNC software running on your computer Video/Audio Configuration

This screen is used to adjust the display and audio parameters. Click **Management > Video/Audio**. The screen shown below appears.



1. Move the **Brightness** slider: values range between -128 and 127
2. Move the **Contrast** slider: values range between 0 and 255
3. Move the **Saturation** slider: values range between 0 and 255
4. Move the **Audio Channel Volume** (left) slider: values range between 0 and 100
5. Move the **Audio Channel Volume** (right) slider: values range between 0 and 100
6. If any changes were made to this screen, do the following:
  - To enable the changes, click **Apply**
  - To save the changes, click the **Administration** menu > click **Save Configuration** > click **Save**.



# TAS CONFIGURATION

This screen works in conjunction with **TAS**. (TAS software can be purchased through Tivella at [www.tivella.com](http://www.tivella.com) or through an authorized Tivella dealer/reseller.) Click **Management** > **TAS**. The screen shown below appears.

The screenshot shows the ND4210w web interface. On the left, the 'Management' menu is expanded, and 'TAS' is selected. The main content area is titled 'TAS Configuration' and contains two input fields: 'Timeout (sec)' with the value '20' and 'IP Address' with the value 'tas-intranet'. An 'Apply' button is located at the bottom right of the configuration area.

1. In the **Timeout (sec)** field, type the number of seconds for the **ND4210w** to access TAS.
2. In the **IP Address** field is a valid DNS name automatically generated by TAS when connected to a network but empty when used as a standalone.
3. If any changes were made to this screen, do the following:
  - To enable the changes, click **Apply**
  - To save the changes, click the **Administration** menu > click **Save Configuration** > click **Save**.

# FTP SERVER

**FTP server** is only for Network Displays with local storage. The **FTP server** allows you to use an FTP client for uploading files.

The screenshot displays the web interface of a ViewSonic ND4210w network display. On the left is a navigation menu with tabs for 'Show IP', 'Video', and 'Browser'. The 'Management' section is expanded, showing options like Startup, Browser, VNC Client, Video/Audio, TAS, FTP Server, and System Services. The 'FTP Server' option is highlighted with a black arrow. Below this, the 'Actions' section lists various video and system functions, and the 'Administration' section lists system management tasks. The 'Help' section is at the bottom. The main content area on the right is titled 'FTP server configuration'. It contains two input fields: 'FTP server username' and 'FTP server password', both with 'admin' entered. An 'Apply' button is located at the bottom right of the configuration area.

FTP server configuration	
FTP server username	admin
FTP server password	admin
<input type="button" value="Apply"/>	

# SYSTEM SERVICES CONFIGURATION

Configure System Services in the MIB (Management Information Base) to manage the following groups: Network, Browser, Video/Audio, TAS, and System Services. Click **Management** > **System services**. The screen shown below appears.

The screenshot shows the 'System Services Configuration' interface for the ND4210w device. On the left, a sidebar menu under 'Management' includes 'Startup', 'Browser', 'VNC Client', 'Video/Audio', 'TAS', 'FTP Server', and 'System Services' (which is selected). Below this are 'Actions' and 'Administration' sections. The main configuration area on the right has a title bar 'System Services Configuration' and two rows of settings: 'Network Media Player ( port 6666 )' with a dropdown set to 'Yes', and 'MIB Event Notification' with a dropdown set to 'No'. An 'Apply' button is located at the bottom right of the configuration area.

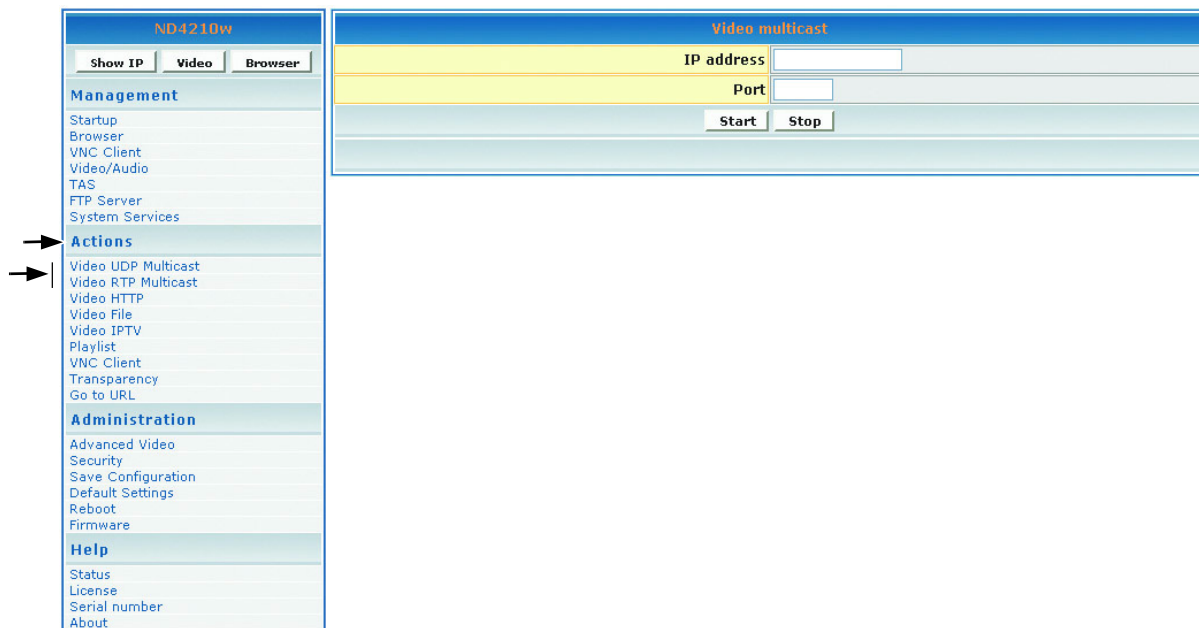
1. In the **Network Media Player (port 6666)** field, select **Yes** to access the **ND4210w** using a Telnet client on port 6666. If you do not want this, select **No**.
2. In the **MIB Event Notification** field, select **Yes** to be notified of changes that you made to the **ND4210w** settings.
3. If any changes were made to this screen, do the following:
  - To enable the changes, click **Apply**
  - To save the changes, click the **Administration** menu > click **Save Configuration** > click **Save**.

# ACTIONS

This section mainly concerns video related activities. Video can be streamed by UDP, RTP, IP/TV or HTTP stream and organized in Playlists. When you initiate a stream, you can see the video on your display. You can also change the **Transparency** of the OSD or go to a specific URL on the fly.

## VIDEO UDP/RTP MULTICAST

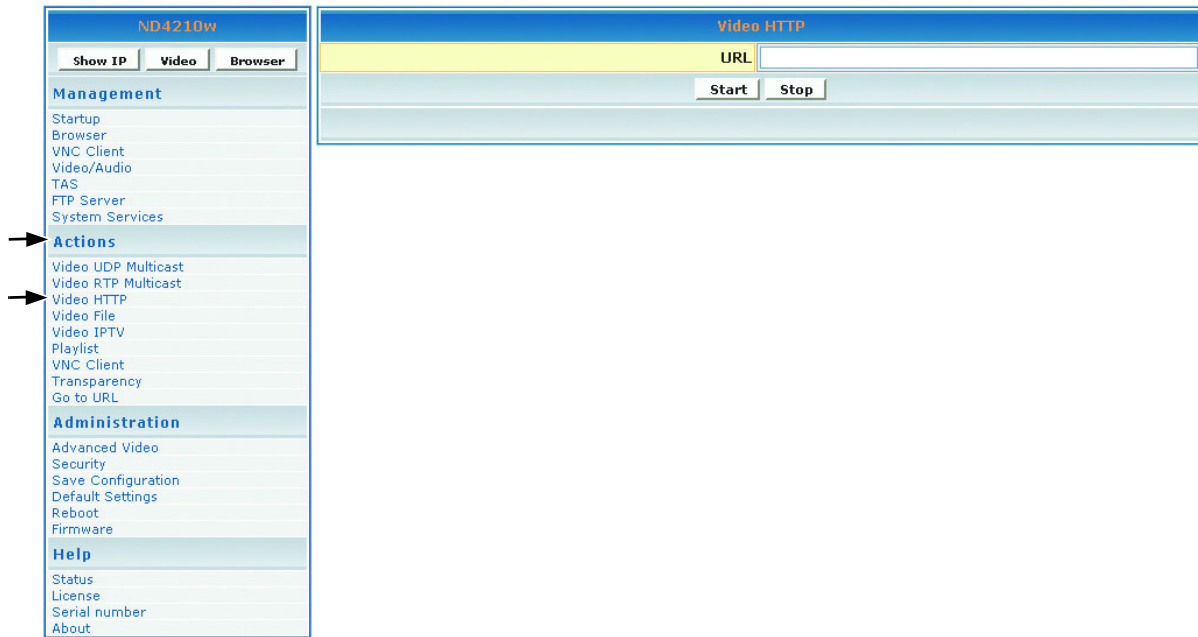
This screen allows you to play streams using assorted protocols. Select **Actions > Video Multicast**. The screen shown below appears.



1. In the **IP address** field, type the IP Address transmitting UDP/RTP based multicast stream (for example, 239.1.1.7)
2. In the **Port** field, type the **Port** number used to receive the multicast.
3. To tell the system to listen to the UDP/RTP multicast stream from the IP on the Port that you entered, click **Start**.

# VIDEO HTTP

To get to the browser setup screen, click **Actions** > **Video HTTP**. The screen shown below appears.



1. In the **URL** field, type the URL that corresponds to the HTTP stream that you want to appear on the display (for example: `http:192.168.12.x/movie.mpg`, or, `http://<server-ip>/file.mpg`).
2. To tell the system to listen to the HTTP stream from the entered URL, click **Start**.

# VIDEO IPTV

The Video IPTV screen allows you to play Split Stream files where the video and audio information being streamed is in two different addresses. This is similar to RTP and UDP multicast except the values for video and audio are entered separately. To get to the **Video IPTV** screen, click **Actions** > **Video IPTV**. The screen shown below appears.

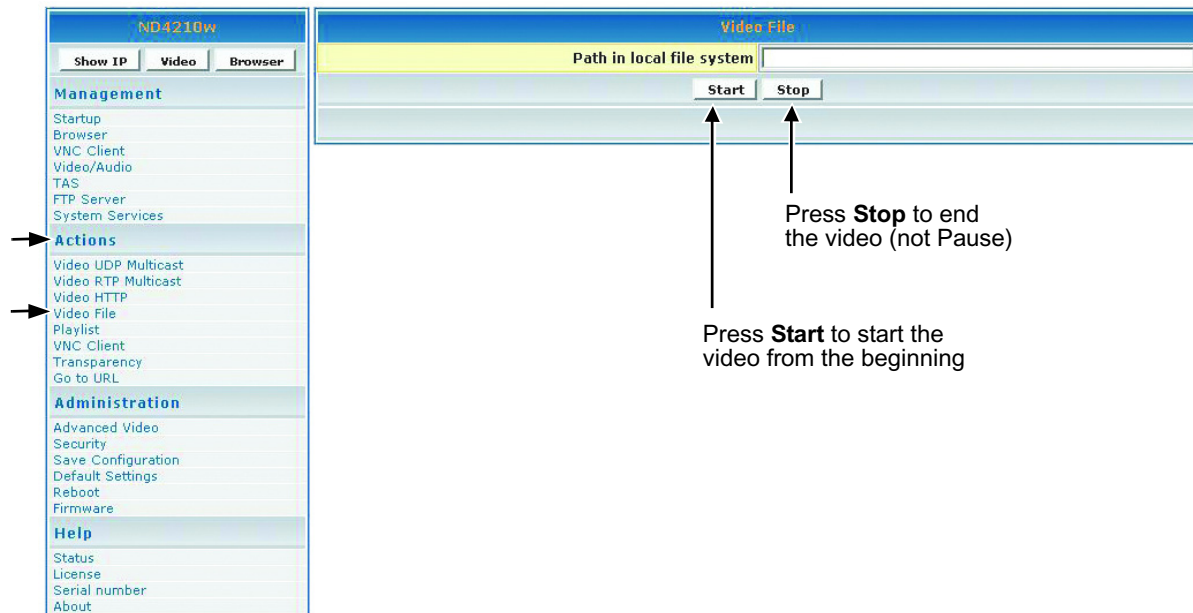
The screenshot displays the ND4210w web interface. On the left, the 'Actions' menu is expanded, showing 'Video IPTV' as the selected option. The main content area is titled 'Video IPTV' and features three tabs: 'Show IP', 'Video', and 'Browser'. The 'Video' tab is currently selected, revealing configuration fields for both video and audio streams. The 'Video' section includes 'IP address' and 'Port' input fields. The 'Audio' section also includes 'IP address' and 'Port' input fields. At the bottom of the configuration area, there are 'Start' and 'Stop' buttons.

1. Under **Video**, enter the **IP Address** and **Port** of the Video stream
2. Under **Audio**, enter the **IP Address** and **Port** of the Audio stream
3. Click **Start**

# VIDEO FILE

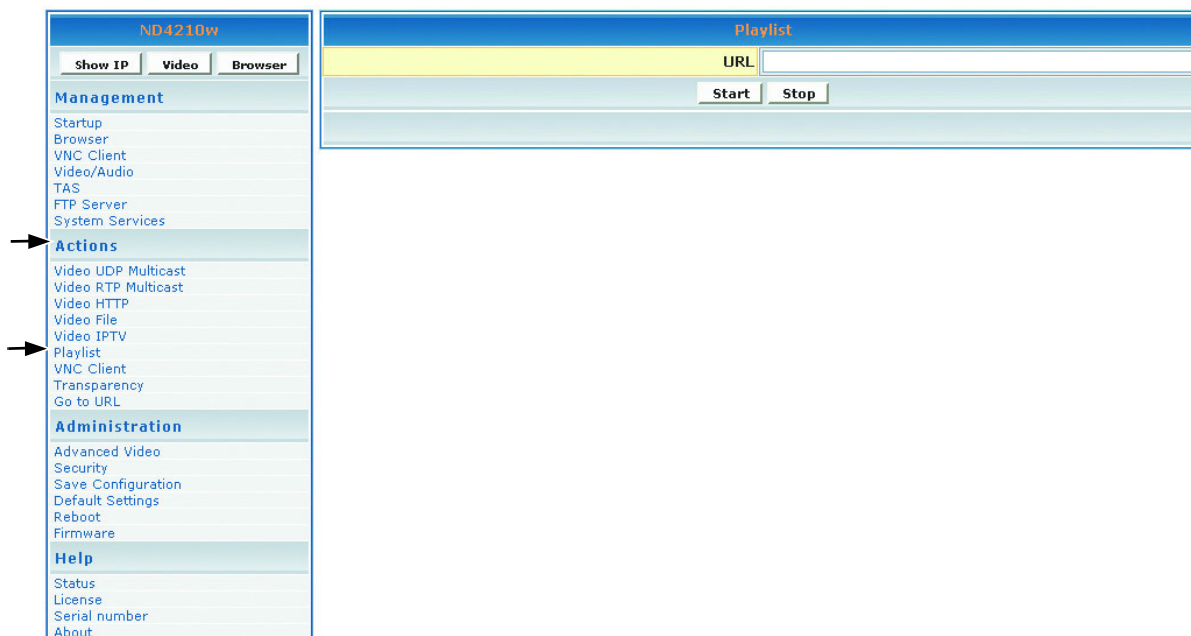
The **Video File** screen allows you to play video files stored in the internal Hard Drive. Click **Actions > Video File** and the screen shown below appears. The location of the hard drive is /tmp/ftproot/hd1.

1. In the **Video File** field, type /tmp/ftproot/hd1/sample\_video.mpg then click **Start**.
2. If the video file is inside a folder (example: /movie) in the hard drive, type /tmp/ftproot/hd1/**movie**/sample\_video.mpg



# PLAYLIST

To stream existing video **Playlists** on an HTTP server, click **Actions > Playlist**. The screen shown below appears.



1. In the **URL** field, type the URL that corresponds to the **Playlist** to appear on the display (for example, `http://192.168.12.x/playlist.txt` or, type the address to start playback such as `http://<server-ip>/playlists.pls`).
2. To tell the system to listen to the **Playlist** from the entered URL, click **Start**.

## To create a playlist

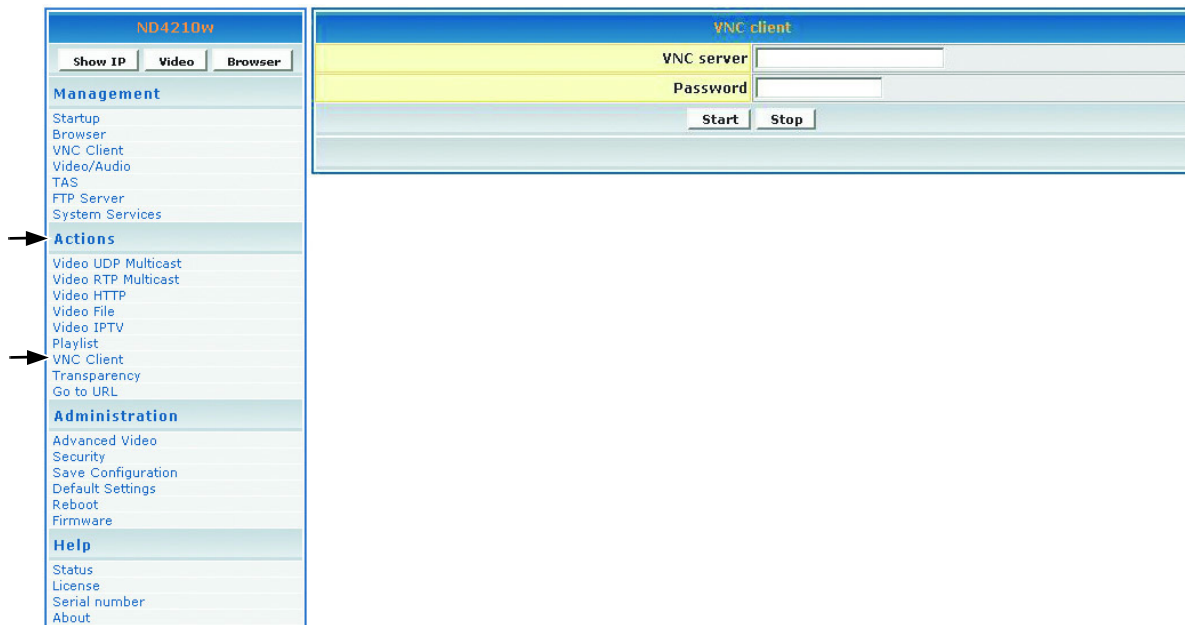
A **Playlist** is a text file that can be created in any text editor with an extension of .txt. A **Playlist** is necessary when you want the **ND4210w** to play specific content, in a specific order, usually looped. You can create a looped **Playlist** for the http streams as shown below. For a **Playlist** that is not looped, list the desired content without the keyword "loop."

```
loop
http http://192.168.12.x/movie1.mpg
http http://192.168.12.x/movie2.mpg
http http://192.168.12.x/movie3.mpg
```



# VNC CLIENT (ACTIONS)

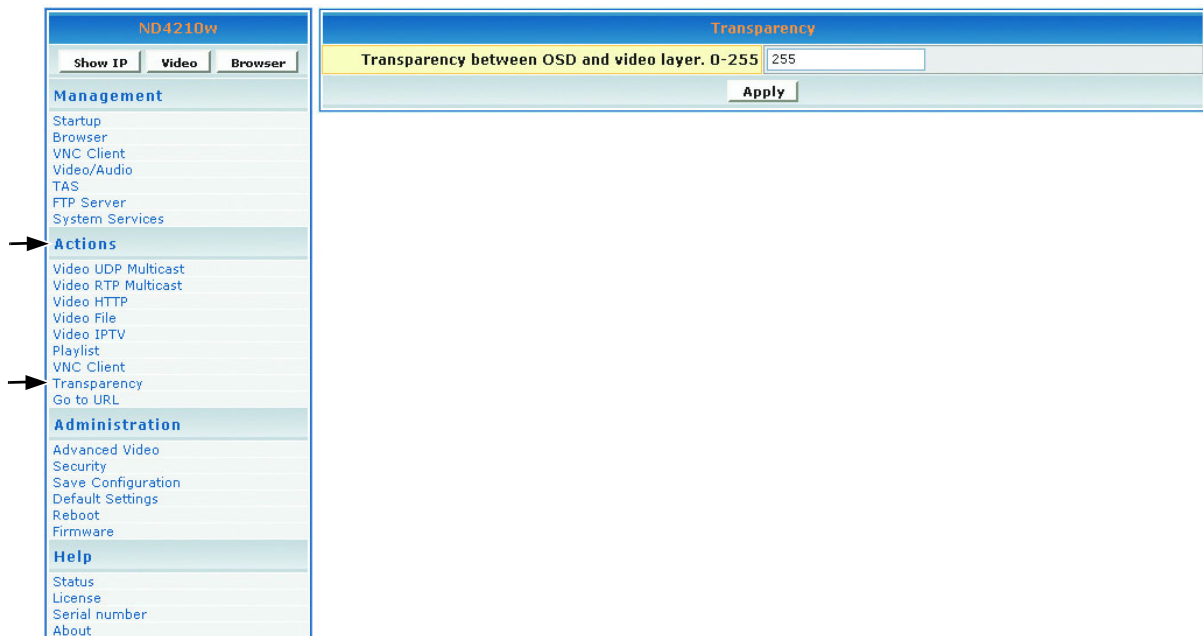
To use **VNC Client**, you must have VNC software running on your PC (sold separately). The VNC (Virtual Network Computing) client screen shown below allows you to connect and display a remote desktop running a VNC server.



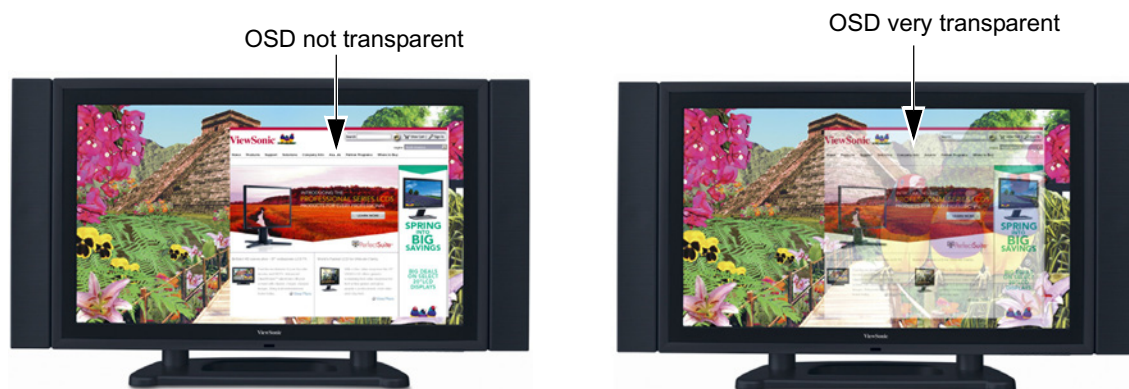
1. In the **VNC server** field, type the IP Address of the VNC server.
2. In the **Password** field, type the password of the VNC server whose IP is entered above.  
**IMPORTANT!** The password must be at least six (6) characters (can be alpha-numeric).
3. To display the remote desktop click **Start**

# TRANSPARENCY

To change the transparency of the browser on-screen in relation to the video image in the background, click **Actions** > **Transparency**. The screen shown below appears.



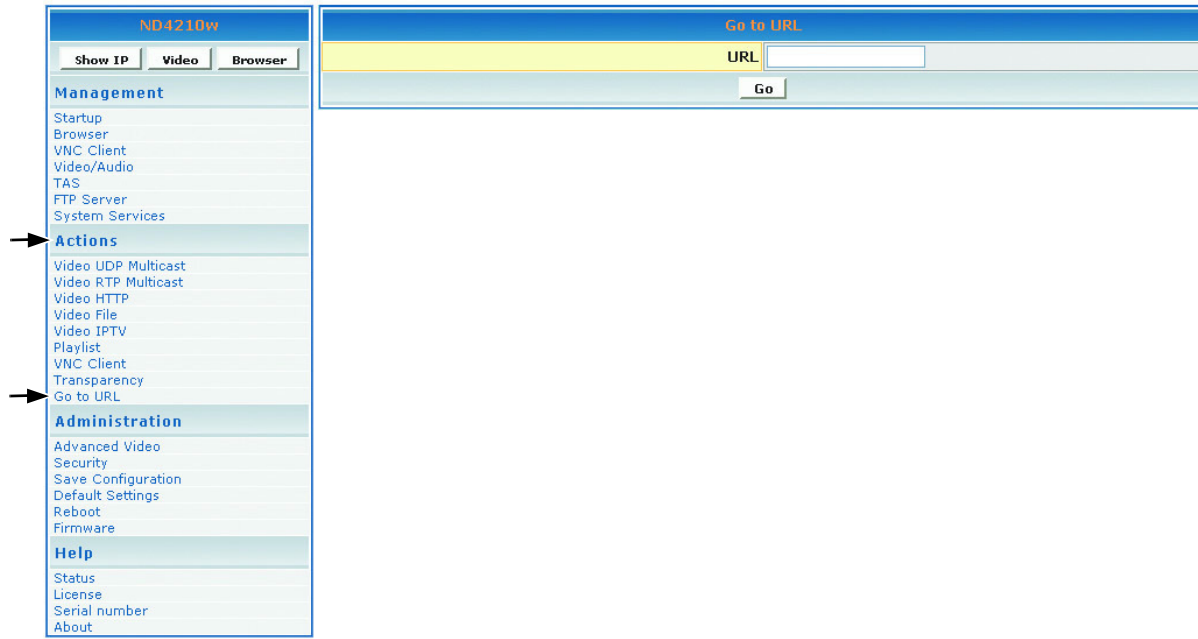
1. In the **Transparency between OSD and video layer** field, type a number between 0 to 255 for a more or less transparent (translucent) browser image (user interface) so you can still see through the browser OSD (On-Screen Display) shown below on the right with your video or other images: 0 = no OSD, 255 = no video, 128 = equal transparency between video and OSD layers.



2. To apply the entered transparency value to the image on the **ND4210w**, click **Apply**.

# Go to URL

To go to a web page on the browser, click **Actions > Go to URL**. The screen shown below appears.



1. In the **URL** field, type the desired URL.
2. To redirect the browser to the URL that you entered, click **Go**. The web page appears on your display.

# ADMINISTRATION

## ADVANCED VIDEO CONFIGURATION

To adjust the size and location of the video on the screen, click **Administration > Advanced video**. The screen shown below appears.

The screenshot shows the ND4210w web interface. On the left, the 'Administration' menu is highlighted with two arrows. The main content area is titled 'Advanced video Configuration' and contains the following fields:

Advanced video Configuration	
X of destination window	2048
Y of destination window	2048
Width of destination window	4096
Height of destination window	4096
<input type="button" value="Apply"/>	

1. In the **X of destination window**, type the center point of the screen on the X axis.
2. In the **Y of destination window**, type the center point of the screen on the Y axis.
3. In the **Width of destination window**, type the width of the destination window.
4. In the **Height of destination window**, type the height of the destination window.
5. If any changes were made to this screen, do the following:
  - To enable the changes, click **Apply**
  - To save the changes, click the **Administration** menu > click **Save Configuration** > click **Save**.

# SECURITY

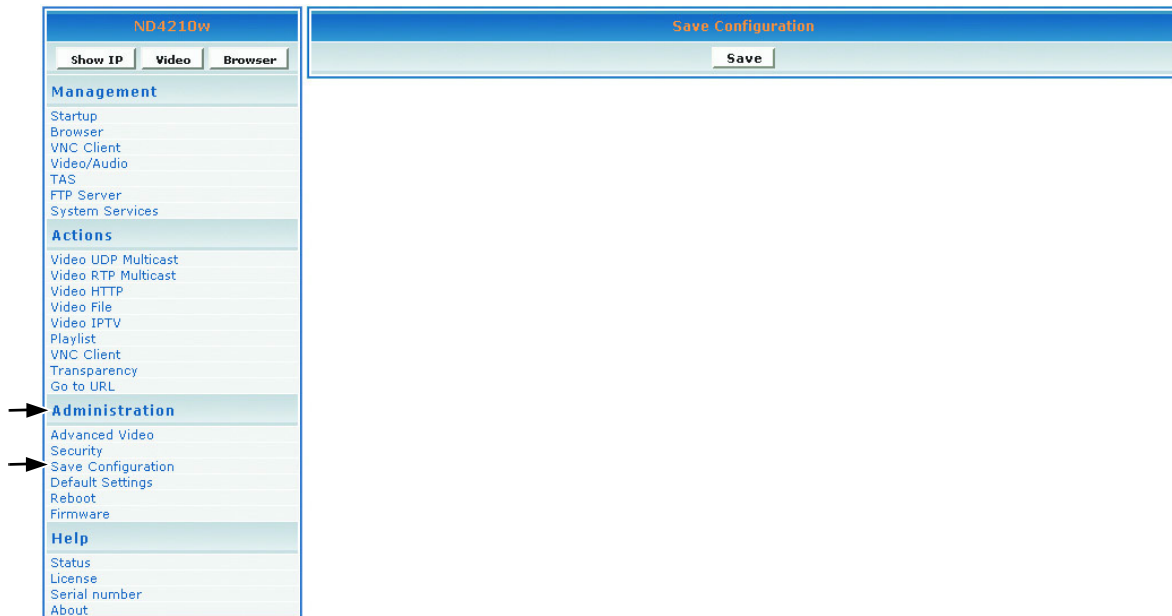
To change the **User name** and **Password** of the **ND4210w**, click **Administration > Security**. Current settings automatically appear in each field as shown below: default User name/Password is admin/admin.

The screenshot displays the ND4210w web interface. On the left, a sidebar menu is visible with categories: Management, Actions, Administration, and Help. The 'Administration' menu is expanded, and 'Security' is selected. The main content area is titled 'Security Credentials' and contains three input fields: 'User name' with the value 'admin', 'Password' with masked characters '\*\*\*\*\*', and 'Repeat password' with masked characters '\*\*\*\*\*'. An 'Apply' button is located at the bottom right of the form.

1. In the **Password** field, type a new password.
2. In the **Repeat Password** field, re-type the new password.
3. If any changes were made to this screen, do the following:
  - To enable the changes, click **Apply**
  - To save the changes, click the **Administration** menu > click **Save Configuration** > click **Save**.

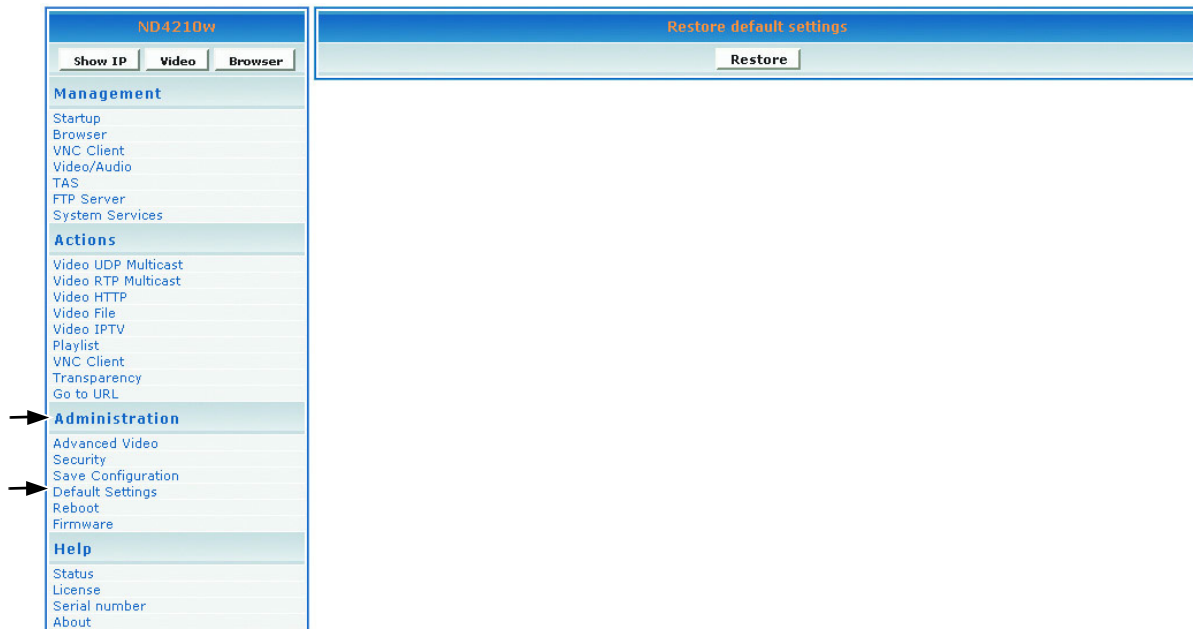
# SAVE CONFIGURATION

To save your settings on the **ND4210w**, click **Administration > Save Configuration**. The screen shown below appears. Click **Save**.



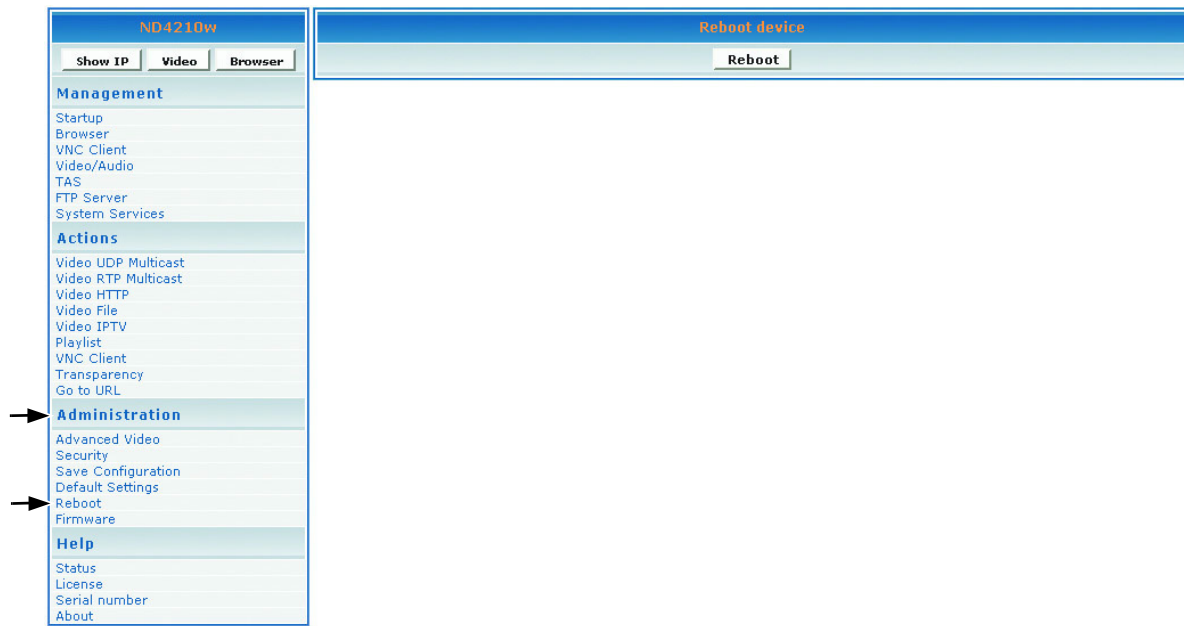
# DEFAULT SETTINGS/RESET

To restore the **ND4210w** back to factory settings, click **Administration > Default settings**. The screen shown below appears. Click **Restore**. User-defined settings will be lost. Or, press and hold the **RESET** button on the back of the display for five (5) seconds to restore the default settings.



# REBOOT

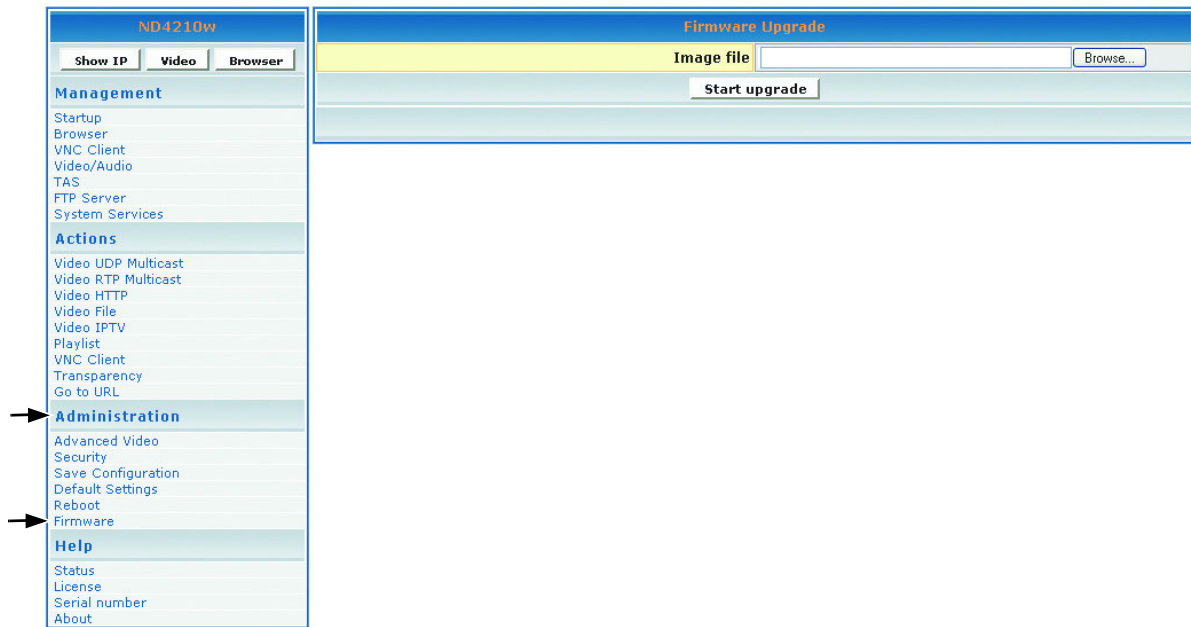
To reboot the **ND4210w**, click **Administration > Reboot**. The screen shown below appears. Click **Reboot**. The **ND4210w** reboots.





# FIRMWARE UPGRADE

To upgrade the firmware on the **ND4210w**, click **Administration > Firmware**. The screen shown below appears. Click **Browse** to open the firmware file > click **Start upgrade**.



# HELP

## STATUS

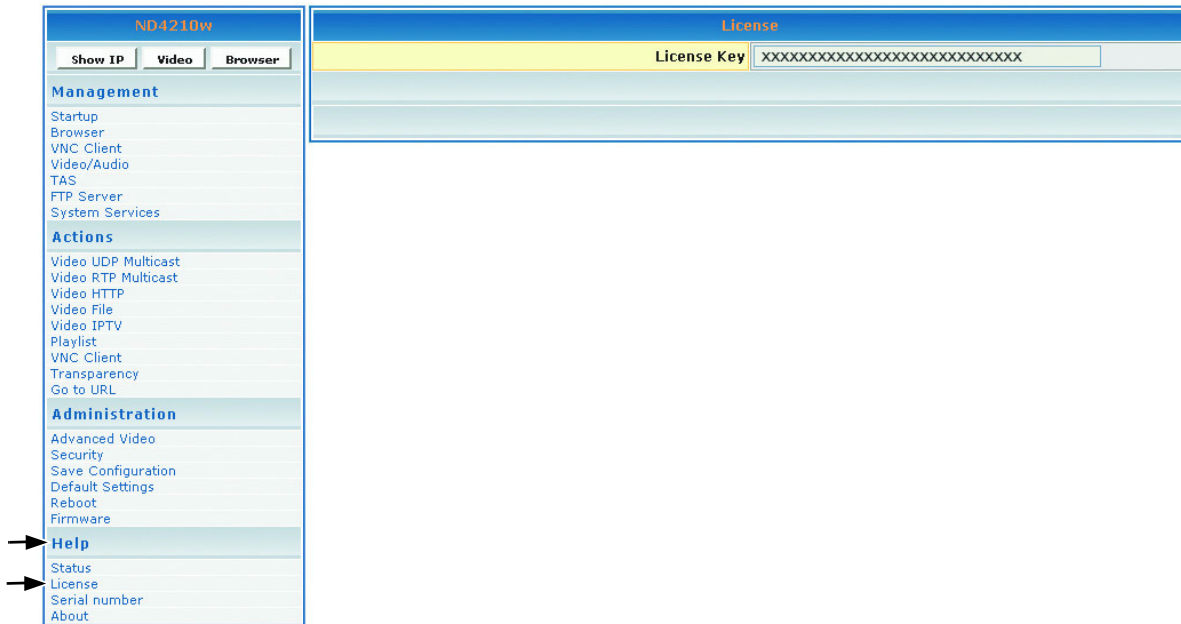
**Status** refers to the log where you can track activity on a specific **ND4210w**. To show the **Status** log, click **Help** > **Status**. The screen shown below is for information only (no inputs).

The screenshot shows the 'ND4210w' interface with the 'Device status' tab selected. The left sidebar contains a 'Help' menu with 'Status' highlighted. The main content area displays a list of system parameters and their values.

Parameter	Type	Value
init.License_ro	T_STRING	Y
init.License	T_STRING	000F8800001049903A6A1F5492C0607A
init.DefaultFactorySetup	T_STRING	SETUP NUMBER_2 NUMBER_9
init.build	T_STRING	Mon Feb 20 10:01:18 PST 2006
init.model_name	T_STRING	NMP-500
init.product	T_STRING	NMP-500
init.version	T_STRING	2.00-RC6
init.macAddress	T_STRING	00:0f:
init.manufactHardware	T_STRING	
init.manufactVendor	T_STRING	
init.manufactDate	T_STRING	
init.lHydraServerPort	T_STRING	8080
init.lHydraServerAddress	T_STRING	192.168.12.99
init.BigHydraServerAddr	T_STRING	64.1.254.116
init.lightHydraMacUpdate	T_STRING	yes
init.startService_xapp	T_STRING	no
init.startService_X11	T_STRING	yes
init.startNtpclient	T_STRING	no
init.startInetd	T_STRING	yes
init.startService_mib_mc	T_STRING	no
init.startService_tnet	T_STRING	no
init.startService_rs232	T_STRING	no
init.startService_kbd	T_STRING	yes
init.startService_api	T_STRING	no
init.startService_vt1	T_STRING	no
init.startService_pickch	T_STRING	no
init.startService_sigma	T_STRING	yes
init.startService_sinfo	T_STRING	yes
init.startService_smb	T_STRING	yes
init.startService_mibevt	T_STRING	no
init.startService_mibifc	T_STRING	yes
init.startService_mib	T_STRING	yes
init.startService_shell	T_STRING	yes

# LICENSE

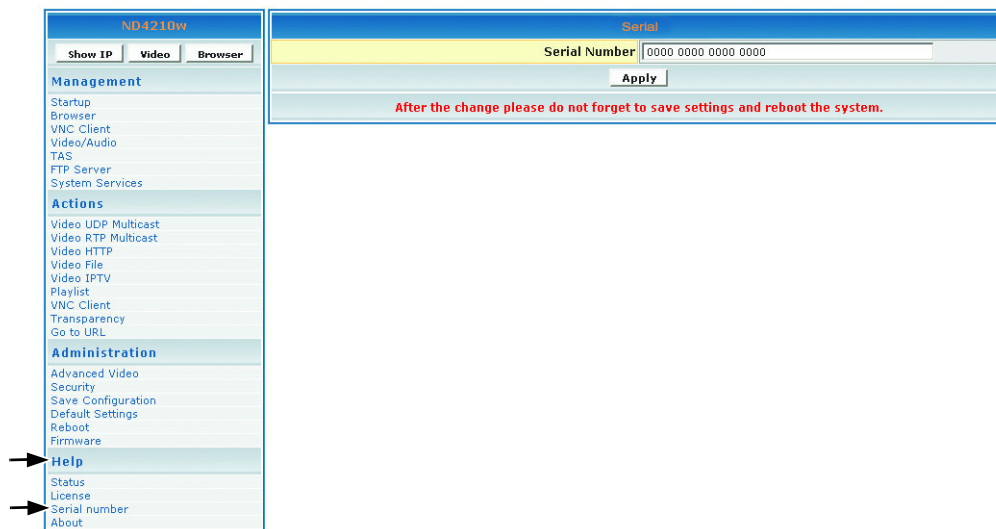
To activate the license on the **ND4210w**, click **Help > License**. The **License Key** may appear automatically in the screen shown below (read-only).



# SERIAL NUMBER

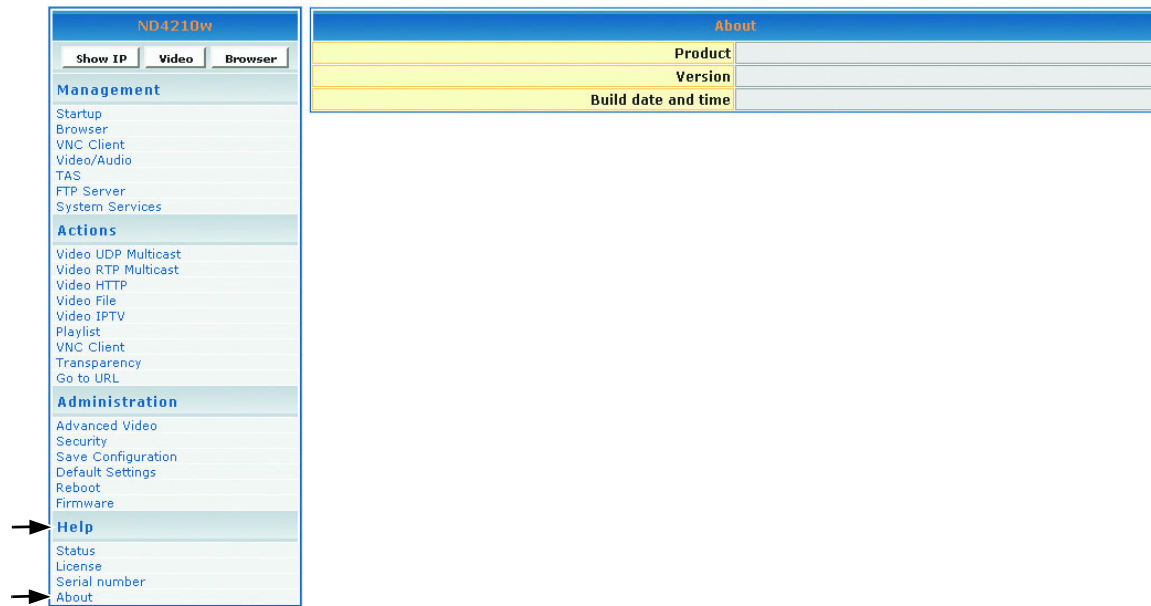
The **Serial Number** screen allows you to enter the **Serial Number** of the product. Click **Help > Serial number**. The screen shown below appears. Once entered, the information cannot be changed.

1. Look at the back of the device and record the **Serial Number** of the product.
2. In the **Serial Number** field, type the **Serial Number** > click **Apply**.



# ABOUT

To show the current version of the product, click **Help > About**. The screen shown below appears (information only).



# APPENDIX

## SCREENS

## MANAGEMENT

ND4210w

Show IP Video Browser

Management

Startup  
Browser  
VNC Client  
Video/Audio  
TAS  
FTP Server  
System Services  
Actions  
Video UDP Multicast  
Video RTP Multicast  
Video HTTP  
Video File  
Video IPTV  
Playlist  
VNC Client  
Transparency  
Go to URL  
Administration  
Advanced Video  
Security  
Save Configuration  
Default Settings  
Reboot  
Firmware  
Help  
Status  
License  
Serial number  
About

Startup URLs

Video

Browserhttp://www.viewsonic.com

Network Configuration

MAC address00:0F:44:00:00:01

DHCPDisabled

IP address192.168.12.103

Subnet mask255.255.255.0

Default gateway192.168.12.1

DNS server IP address192.168.12.1

Apply

Browser Configuration

Macromedia Flash AccelerationDisabled

Macromedia Flash Transparency SourceBrowser

Screen rotation angle (clockwise)0

Browser ProxyDisabled

Browser Proxy IP

Browser Proxy PORT0

Default transparency between OSD and video layer.0-255128

Start screen display time (milliseconds)5000

Screen Height768

Screen Width1366

Apply

VNC client configuration

VNC server address

VNC server password

X coordinate of VNC windows left-top corner0

Y coordinate of VNC windows left-top corner0

VNC full screen modeNo

VNC auto restart modeNo

Delay (in milliseconds) before restart VNC5000

Apply

Video/Audio Configuration

Brightness0

Contrast128

Saturation128

Audio Channel Volume (left)0

Audio Channel Volume (right)0

Apply

TAS Configuration

Timeout (sec)20

IP Addresstas-intranet

Apply

FTP server configuration

FTP server usernameadmin

FTP server passwordadmin

Apply

System Services Configuration

Network Display (port 6666)Yes

MIB Event NotificationNo

Apply

# ACTIONS

**ND4210w**

Show IP Video **Browser**

**Management**

Startup  
Browser  
VNC Client  
Video/Audio  
TAS  
FTP Server  
System Services

→ **Actions**

Video UDP Multicast  
Video RTP Multicast  
Video HTTP  
Video File  
Video IPTV  
Playlist  
VNC Client  
Transparency  
Go to URL

**Administration**

Advanced Video  
Security  
Save Configuration  
Default Settings  
Reboot  
Firmware

**Help**

Status  
License  
Serial number  
About

**Video multicast**

IP address

Port

Start Stop

**Video HTTP**

URL

Start Stop

**Video IPTV**

**Video**

IP address

Port

**Audio**

IP address

Port

Start Stop

**Video File**

Path in local file system

Start Stop

**Playlist**

URL

Start Stop

**VNC client**

VNC server

Password

Start Stop

**Transparency**

Transparency between OSD and video layer. 0-255

Apply

**Go to URL**

URL

Go

# ADMINISTRATION

ND4210w

Show IPVideoBrowser

Management

Startup

Browser

VNC Client

Video/Audio

TAS

FTP Server

System Services

Actions

Video UDP Multicast

Video RTP Multicast

Video HTTP

Video File

Video IPTV

Playlist

VNC Client

Transparency

Go to URL

Administration

Advanced Video

Security

Save Configuration

Default Settings

Reboot

Firmware

Help

Status

License

Serial number

About

Advanced video Configuration

X of destination window2048

Y of destination window2048

Width of destination window4096

Height of destination window4096

Apply

Security Credentials

User nameadmin

Password\*\*\*\*\*

Repeat password\*\*\*\*\*

Apply

Save Configuration

Save

Restore default settings

Restore

Reboot device

Reboot

Firmware Upgrade

Image file

Browse...

Start upgrade



# HELP

ND4210w

Show IPVideoBrowser

Management

Startup  
Browser  
VNC Client  
Video/Audio  
TAS  
FTP Server  
System Services

Actions

Video UDP Multicast  
Video RTP Multicast  
Video HTTP  
Video File  
Video IPTV  
Playlist  
VNC Client  
Transparency  
Go to URL

Administration

Advanced Video  
Security  
Save Configuration  
Default Settings  
Reboot  
Firmware

Help

Status  
License  
Serial number  
About

Device status

init.license\_ro T\_STRING Y

init.license T\_STRING 000F8800001049903A6A1F5492C0607A

init.defaultFactorySetup T\_STRING SETUP NUMBER\_2 NUMBER\_9

init.build T\_STRING Mon Feb 20 10:01:18 PST 2006

init.model\_name T\_STRING NMP-500

init.product T\_STRING NMP-500

init.version T\_STRING 2.00-RC6

init.macAddress T\_STRING 00:0f:

init.manufactHardware T\_STRING

init.manufactVendor T\_STRING

init.manufactDate T\_STRING

init.lHydraServerPort T\_STRING 8080

init.lHydraServerAddress T\_STRING 192.168.12.99

init.BigHydraServerAddr T\_STRING 64.1.254.116

init.lightHydraMacUpdate T\_STRING yes

init.startService\_xapp T\_STRING no

init.startService\_X11 T\_STRING yes

init.startNtpclient T\_STRING no

init.startInetd T\_STRING yes

init.startService\_mib mc T\_STRING no

init.startService\_tnet T\_STRING no

init.startService\_rs232 T\_STRING no

init.startService\_kbd T\_STRING yes

init.startService\_api T\_STRING no

init.startService\_vt1 T\_STRING no

init.startService\_pickch T\_STRING no

init.startService\_sigma T\_STRING yes

init.startService\_sinfo T\_STRING yes

init.startService\_smb T\_STRING yes

init.startService\_mibevt T\_STRING no

init.startService\_mibifc T\_STRING yes

init.startService\_mib T\_STRING yes

init.startService\_shell T\_STRING yes

License

License KeyXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Serial

Serial Number0000 0000 0000 0000

Apply

After the change please do not forget to save settings and reboot the system.

About

Product

Version

Build date and time

# CUSTOMER SUPPORT

You need the product serial number when you contact **Customer Support**.

<b>Country/Region</b>	<b>Website</b> (for email address also)	<b>T = Telephone</b> <b>F = FAX</b>
United States	viewsonic.com	<b>T:</b> (800) 688-6688 <b>F:</b> (909) 468-1202
Canada	viewsonic.com	<b>T:</b> (866) 463-4775 <b>F:</b> (909) 468-5814
United Kingdom	viewsoniceurope.com	<b>T:</b> 0800 833 648 <b>F:</b> 01794 500801
Europe, Middle East, Baltic countries, and North Africa	viewsoniceurope.com	Contact your reseller
Australia and New Zealand	viewsonic.com.au	<b>T:</b> +61 2 9929 3955 <b>F:</b> +61 2 9929 8393
Singapore/India and Southeast Asia	viewsonic.com.sg	<b>T:</b> 65 273 4018 <b>F:</b> 65 273 1566
Taiwan	viewsonic.com.tw	<b>T:</b> 866 2 2246 3456 <b>F:</b> 866 2 8242 3733
Other Asia Pacific countries		Contact your reseller
South Africa	viewsonic.com/asia	<b>T:</b> 886 2 2246 3456 <b>F:</b> 886 2 8242 3668

# COMPLIANCE AND SAFETY NOTICES

## FCC CLASS A COMPLIANCE NOTICE (UNITED STATES)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at user's own expense.

You can determine whether your equipment is causing interference by turning it off. If the interference stops, it was probably caused by this equipment or one of its peripheral devices. If the equipment causes interference to radio or television reception, try to correct the interference by using one or more of the following measures:

- Turn the television or radio antenna until the interference stops.
- Move the equipment to one side or the other of the television or radio.
- Move the equipment farther away from the television or radio.
- Plug the equipment into an outlet that is on a different circuit from the television or radio. (That is, make certain the equipment and the television or radios are on circuits controlled by different circuit breakers or fuses.)

Modifying the equipment without proper authorization may result in the equipment no longer complying with FCC requirements for Class A or Class B digital devices. In that event, your right to use the equipment may be limited by FCC regulations, and you may be required to correct any interference to radio or television communications at your own expense.



### **MERCURY WARNING**

This product contains mercury. Dispose of in accordance to local, state and federal laws.

## CANADIAN COMPLIANCE NOTICE

**English:** This digital apparatus does not exceed the Canada ICES-003 Class A limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

**French:** Le present appareil numerique nemet pas de bruits radioelectriques depassant les limites applicables aux appareils numeriques de Canada ICES-003 Class A prescrites dans le reglement sur le brouillage radioelectrique edicte par le Ministere des Communications du Canada.



**WARNING** This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

## GOST-R CERTIFICATION

This product is GOST-R certified.



## EUROPEAN COMPLIANCE NOTICE

Products with the CE Marking comply with both the EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community. Compliance with these directives implies conformity to the following European Norms:



- EN55022 (CISPR 22) Class A Radio Frequency Interference
- EN55024 (IEC61000-4-2, -4-4, -4-5, -4-6, -4-11)
- EN60950 (IEC950) Product Safety



**WARNING** This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

### For EU-member states only as follows

The mark shown to the right is in compliance with the Waste Electrical and Electronic Equipment Directive 2002/96/EC (WEEE). The mark indicates the requirement NOT to dispose the equipment as unsorted municipal waste, but use the return and collection systems according to local law.



## FOR TAIWAN AND OTHER TRADITIONAL CHINESE MARKETS



**WARNING** This is a Class A Information Product, when used in residential environment, it may cause radio frequency interference, under such circumstances, the user may be requested to take appropriate countermeasures. Note: Product BSMI approval license number is on the product label outside the system enclosure.

### 警告使用者

這是甲類資訊產品，在居住環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。注意：產品的度和檢驗標準局 (BSMI) 核准授權號碼在系統外殼的產品標籤上。

## CHINA CCC MARK



**WARNING** This is a Class A Device. It may cause radio frequency interferences if used in residential environment, in this case, it may be required to have countermeasures.

### CCC Class A Declaration

此为A级产品，在生活环境中，该产品可能会造成无线电干扰。在这种情况下，可能需要用户对其干扰采取切实可行的措施。

## DECLARATION OF RoHS COMPLIANCE

This product has been designed and manufactured in compliance with Directive 2002/95/EC of the European Parliament and the Council on restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS Directive) and is deemed to comply with the maximum concentration values issued by the European Technical Adaptation Committee (TAC) as shown below:



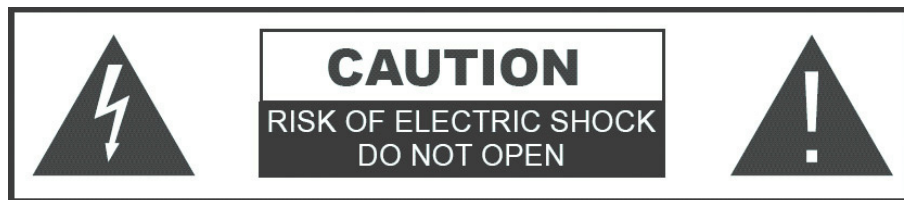
Substance	Proposed Maximum Concentration	Actual Concentration
Lead (Pb)	0.1%	<0.1%
Mercury (Hg)	0.1%	<0.1%
Cadmium (Cd)	0.01%	<0.01%
Hexavalent Chromium (Cr <sup>6+</sup> )	0.1%	<0.1%
Polybrominated biphenyls (PBB)	0.1%	<0.1%
Polybrominated diphenyl ethers (PBDE)	0.1%	<0.1%

Certain components of products as stated above are exempted under the Annex of the RoHS Directives as noted below. Examples of exempted components are:

1. Mercury in compact fluorescent lamps not exceeding 5 mg per lamp and in other lamps not specifically mentioned in the Annex of RoHS Directive
2. Lead in glass of cathode ray tubes, electronic components, fluorescent tubes, and electronic ceramic parts (e.g. piezoelectronic devices)
3. Lead in high temperature type solders (i.e. lead-based alloys containing 85% by weight or more lead)
4. Lead as an alloying element in steel containing up to 0.35% lead by weight, aluminium containing up to 0.4% lead by weight and as a copper alloy containing up to 4% lead by weight.

## Important Safety Instructions

1. Read these instructions completely before using the equipment.
2. Keep these instructions in a safe place.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this equipment near water.
6. Clean with a soft, dry cloth. If further cleaning is required, see "Cleaning the device" in this guide for further instructions.
7. Do not block any ventilation openings. Install the equipment in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other devices (including amplifiers) that produce heat.
9. Do not attempt to circumvent the safety provisions of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade and the third prong are provided for your safety. If the plug does not fit into your outlet, consult an electrician for replacement of the outlet.
10. Protect the power cord from being tread upon or pinched, particularly at the plug, and the point where it emerges from the equipment. Be sure that the power outlet is located near the equipment so that it is easily accessible.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the equipment. When a cart is used, use caution when moving the cart/equipment combination to avoid injury from tipping over.
13. Unplug this equipment when it will be unused for long periods of time.
14. Refer all servicing to qualified service personnel. Service is required when the unit has been damaged in any way, such as: if the power-supply cord or plug is damaged, if liquid is spilled onto or objects fall into the unit, if the unit is exposed to rain or moisture, or if the unit does not operate normally or has been dropped.
15. To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
16. Do not open it, or there may be risk of electric shock.



17. The socket-outlet shall be installed near the equipment and shall be easily accessible.



## CLEANING THE DEVICE

1. Make sure the device is turned off.
2. Wipe the device with a clean, soft, lint-free cloth. This removes dust and other particles. If still not clean, apply a small amount of glass cleaner with no alcohol, ammonia, benzene, paint thinner, gasoline, or acetone onto a clean, soft, lint-free cloth, and wipe the device. **NEVER SPRAY OR POUR ANY LIQUID DIRECTLY ONTO THE DEVICE!**

**Disclaimer: ViewSonic is not liable for damage resulting from using any ammonia or alcohol-based cleaners.**

## DATA LOSS DISCLAIMER

Before sending the device out for service, be sure to backup all data and remove all third party software, features, parts, options, alterations, and attachments not warranted by ViewSonic prior to sending the product to ViewSonic for service. ViewSonic is not liable for any loss or damage to these items.

With respect to all service provided, it is your responsibility to backup the contents of your device, including any data you have stored or software you have installed on the device. It is likely that the contents of your device will be lost in the course of service and ViewSonic will not be responsible for any damage to or loss of any programs, data or other information stored on any media or any part of any Product serviced hereunder.

IF DURING THE REPAIR OF THE PRODUCT THE CONTENTS OF THE DEVICE ARE ALTERED, DELETED, OR IN ANY WAY MODIFIED, VIEWSONIC IS NOT RESPONSIBLE WHATSOEVER. YOUR PRODUCT WILL BE RETURNED TO YOU CONFIGURED AS ORIGINALLY PURCHASED (SUBJECT TO AVAILABILITY OF SOFTWARE).

# SPECIFICATIONS

Default resolution	1366 x 768 @ 60 Hz WXGA
Dimensions	48" W) x 29" (H) x 12" (D) with stand 1243 mm (W) x 739 mm (H) x 304 mm (D) with stand
Display area	42" diagonal LCD screen 930.25 mm (H) x 523.01 mm(V)
Weight	72.6 lbs (net) 90.2 lbs (gross) 33 kg (net) 41 kg (gross)
Connectivity	<b>Network</b> RJ-45 x 2 for Daisy Chain feature 10/100 Ethernet
	<b>Audio</b> Audio output: 2 x RCA stereo analog Internal analog stereo to power amp
	<b>Communication</b> USB x 2
Streaming protocol types	HTTP, UDP, RTP, IP/TV, Local file playback
Video decoding formats	MPEG-1, MPEG-2, MPEG-4, Macromedia Flash
Audio decoding formats	MPEG-1 (Layers 1 & 2) MP3, WAV
Image file formats	JPEG, PNG
Memory (RAM)	128 MB
Memory (FLASH)	64 MB
Number of colors	16.7 million (8-bit)
Power consumption	240 watts (Max.)
Power input	AC 100 ~ 240 V (max) @ 50/60 Hz
Contrast ratio	1600:1 (Typical), 1200:1 (Min.)
Viewing angle	Over 178°
Operating temperature	0 ~ 40° C (32 ~ 104° F)
Regulatory approvals	FCC-15A, IC, cETLus, CE, C-Tick, NOM, TUV-S Mark, CB, SASO, SABS, CCC, BSMI, PSB, GOST-R, RoHS
Optional accessories	Wall mount kit

Specifications are subject to change without notice. Corporate names and trademarks stated herein are the property of their respective companies.

## LIMITED WARRANTY

Please go to the Customer Support table in this guide for the ViewSonic website in your region to get warranty information.

